



## Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

Pat Quinn, Governor  
Marc Miller, Director

April 14, 2010

Mr. James A. Cavanaugh  
Illinois Dept. of Agriculture  
2280 Bethany Road  
Suite B  
DeKalb, IL 60115

**Re: Gypsy Moth Control Plan – Aerial Application of *Bacillus thuringiensis kurstaki* (BtK) (Site 2 of 8) – Park Forest**  
**Endangered Species Consultation Program**  
**Project Number(s): 1007008**  
**County: Cook & Will**

Dear Mr. Cavanaugh:

This letter is in reference to one of the 27 Gypsy Moth Aerial Spraying blocks your Department submitted for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. The location of this spray block is within Sections 29, 30, 31, and 32, Township 35 North, Range 14 East (Cook County) and Sections 1 and 12, Township 34 North, Range 13 East and Sections 6 and 7, Township 34 North, Range 14 East (Will County).

The project involves the aerial application of BtK two times during the last three weeks of May over a large area between West 26<sup>th</sup> Street to the north and Wolpers Road to the south; the enclosed EcoCAT report shows the extensive spray area. Within the spray block there is a record for the State-listed threatened plant, **Blazing Star**, *Liatris scariosa* var. *nieuwlandii*. Adjacent to, and west of, the spray area is the **Thorn Creek Woods Nature Preserve and Illinois Natural Area Inventory Site**.

BtK is an insecticide harmful to all moths and butterflies (Lepidoptera) that are in their larval caterpillar stage – caterpillars that ingest BtK as they consume leaves sprayed with BtK die when the BtK spores are activated in the insects' stomachs. It works by paralyzing the digestive system and the infected insects stop feeding within hours; the moths and caterpillars die from starvation, which can take several days. The Department is concerned that all native Lepidoptera species within the vicinity of this spray block will be killed, negatively impacting local Lepidoptera populations, adversely impacting food sources for birds, mammals, amphibians, and reptiles, and impacting pollinators of listed plants. Further, eradication of all Lepidoptera on this spray block site will increase Lepidoptera predation rates within the Nature Preserve as song birds, etc. will have to compete for a more limited supply of caterpillars within the Nature Preserve with which to feed their young.

The Department has completed its review of this project and determined that the action is likely to have an adverse impact on the protected resources. To minimize these impacts, the Department recommends the following measures be incorporated into the Department's authorization of this spray block.

1. The larval stage of some butterflies relies on *Liatris* for food as the caterpillar is developing. There are several species of butterflies that also pollinate Blazing Star; this plant also provides food and shelter to adult pollinators. Therefore, spraying BtK in areas where this listed plant exists could adversely impact its ability to be pollinated by Lepidoptera. The Department recommends spraying Pheromone flakes instead.
2. Due to the close proximity of this spray block to Thorn Creek Woods Nature Preserve and the ability of BtK drift to occur and adversely impact Lepidoptera within the Preserve, the Department recommends spraying Pheromone flakes.
3. Spraying should not commence until the Illinois Nature Preserve Commission (INPC) has been contacted and appropriate permits, if necessary, obtained. If spraying is to occur within 300' of the boundary of a Nature Preserve or a Land and Water Reserve, or there is potential for drift into an INPC Site, then INPC will require a permit.

Consultation on the part of the Department is completed. In accordance with 17 Ill. Adm. Code 1075.40(h), the Department of Agriculture must notify the Department of its decision regarding these recommendations, whether they will:

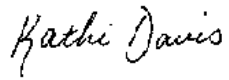
- Allow the action to proceed as originally planned;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resources review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected species are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this consultation review.

Cordially,

A handwritten signature in black ink that reads "Kathi Davis". The signature is written in a cursive, flowing style.

Kathi Davis  
Division of Ecosystems and Environment  
Impact Assessment Section  
Office of Realty & Environmental Planning  
217-785-5500

enclosure

cc: Dan Kirk, IDNR/Region II/Natural Heritage  
Joe Rogus, IDNR/Region II/Wildlife  
Scott Garrow, IDNR/Region II/Wildlife  
Kelly Neal, Illinois Nature Preserves Commission  
Steve Byers, Illinois Nature Preserves Commission  
Kim Roman, Illinois Nature Preserves Commission